

APPENDIX A

Docket 2000.12
09/546,262
Clean Claims

1. (Thrice Amended) A battery separator comprising:

a microporous polyolefinic membrane having a porosity in a range of 30 - 80%, an average pore size in a range of 0.02 - 2.0 microns, and being made from a blend of a polyolefin polymer, selected from the group consisting of high density polyethylene, polypropylene, polybutene, and polymethyl pentene, and an oligomer of a polyolefinic polymer, and said oligomer comprising at least 20% by weight of said blend.

2. (Thrice Amended) A battery separator comprising:

a microporous polyolefinic membrane having a porosity in a range of 30 - 80%, an average pore size in a range of 0.02 - 2.0 microns, and being made from a blend of a C₁ - C₇ based polymer, wherein said C₂ based polymer having a molecular weight less than 500,000, and a C₁ - C₇ based oligomer, and said oligomer comprising at least 20% by weight of said blend.

7. (Amended) The separator according to Claims 1 or 2 wherein said polymer being a high density polyethylene.

9. (Thrice Amended) A battery separator for a lithium rechargeable battery comprising a microporous polyolefinic membrane having a shutdown temperature of less than about 130°C, a porosity in a range of 30 - 80%, an average pore size in a range of 0.02 - 2.0 microns, and being made from a blend of a high density polyethylene polymer and a polyethylene wax having a molecular weight less than 6000, and said wax comprising at least 20% by weight of said blend.